LG
Life's Good

OWNER'S MANUAL

LG Digital Signage
(MONITOR SIGNAGE)

Please read this manual carefully before operating your set and retain it for future reference.

49UH5B
55UH5B
65UH5B

www.lg.com

ENGLISH

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Safety precautions

Please read these safety precautions carefully before using the product.

WARNING

If you ignore the warning message, you may be seriously injured or there is a possibility of accident or death.

CAUTION

If you ignore the caution message, you may be slightly injured or the product may be damaged.

WARNING

- Indoor Use Only.

Precautions in installing the product

WARNING

- Keep away from heat sources like electrical heaters.
  - ▶ Electrical shock, fire, malfunction or deformation may occur.
- Keep the packing anti-moisture material or vinyl packing out of the reach of children.
  - ▶ Anti-moisture material is harmful if swallowed. If swallowed by mistake, force the patient to vomit and visit the nearest hospital. Additionally, vinyl packing can cause suffocation. Keep it out of the reach of children.
- Do not put heavy objects on the product or sit upon it.
  - ▶ If the product collapses or is dropped, you may be injured. Children must pay particular attention.
- Do not leave the power or signal cable unattended on the pathway.
  - ▶ The passerby can falter, which can cause electrical shock, fire, product breakdown or injury.
- Install the product in a neat and dry place.
  - ▶ Dust or moisture can cause electrical shock, fire or product damage.
- If you can smell smoke or other odors or hear a strange sound unplug the power cord and contact the service center.
  - ▶ If you continue to use without taking proper measures, electrical shock or fire can occur.
- If you dropped the product or the case is broken, turn off the product and unplug the power cord.
  - ▶ If you continue to use without taking proper measures, electrical shock or fire can occur. Contact the service center.
- Do not drop an object on or apply impact to the product. Do not throw any toys or objects on the product screen.
  - ▶ It can cause injury to human, problem to product and damage the display.
- Do not let the product fall or drop when connecting it with an external device.
  - ▶ This may cause injury and/or damage to the product.
- When connecting it with a game device, keep a distance of four times as long as the diagonal measurement of the screen from the device.
  - ▶ If the product falls because of the short cable, this may cause injury and/or damage to the product.
- Leaving a fixed image on the screen for a long time may cause damage to the screen and cause image burn-in. To use the product for a long period of time, use a screen saver on the PC or utilize the residual image prevention function on the product, and when the product is not used, turn off the power. Burn-in and related problems are not covered by the warranty on this product.
- Do NOT install this product on a wall where there is high risk of exposure to oil fumes or mist.
  - ▶ This may damage product and cause is to fail.

CAUTION

- Make sure the product ventilation hole is not blocked. Install the product in a suitably wide place (more than 10 cm from the wall)
  - ▶ If you install the product too close to the wall, it may be deformed or fire can break out due to internal heat.
- Do not block the ventilation hole of the product by a tablecloth or curtain.
  - ▶ The product can be deformed or fire can break out due to overheating inside the product.
- Install the product on a flat and stable place that has no risk of dropping the product.
  - ▶ If the product is dropped, you may be injured or the product may be broken.
- Install the product where no EMI occurs.
- Keep the product away from direct sunlight.
  - ▶ The product can be damaged.
- If you install the product in a place that does not meet the recommended conditions, this may cause serious damage to the product's picture quality, life cycle and appearance. Please check with LG or a qualified installer before installing. This caution applies to a place where there is an abundance of fine dust or oil mist, chemical substances are used, the temperature is very high or low, the humidity is very high, or the product is likely to remain turned on for a long period of time (airport and train station), failure to do so will invalidate the warranty.
- Do not install the product in an area with poor ventilation (e.g.on a bookshelf, in a closet) or outside and avoid placing on cushions or carpets.
- In addition, do not install it where there are heating objects such as lighting equipment.i

Precautions to the AC adapter and electrical power

WARNING

- If water or any foreign substance goes inside the product (TV, monitor, power cord, or AC adapter), disconnect the power cord immediately and contact the service center.
  - ▶ Otherwise, this may cause a fire or electric shock due to damage to the product.
- Do not touch the power plug or AC adapter with wet hands. If the pins of the plug are wet or dusty, wipe and dry them before use.
  - ▶ Otherwise, this may cause a fire or electric shock.
- Make sure to completely insert the power cord into the AC adapter.
  - ▶ If loosely connected, the poor connection may cause a fire or electric shock.
- Be sure to use power cords and AC adapters provided or approved by LG Electronics, Inc.
  - ▶ The use of non-approved products may cause a fire or electric shock.
- When unplugging the power cord, always pull it by the plug. Do not bend the power cord with excessive force.
  - ▶ The power line can be damaged, which may cause electric shock or fire.
- Be careful not to step or place heavy objects (electronic appliances, clothing, etc.) on the power cord or AC adapter. Be careful not to damage the power cord or AC adapter with sharp objects.
  - ▶ Damaged power cords may cause a fire or electric shock.
- Never disassemble, repair or modify the power cord or AC adapter.
  - ▶ This may cause a fire or electric shock.
- Make sure to connect the power cable to the grounded current.
  - ▶ You may be electrocuted or injured.
- Use the rated voltage only.
  - ▶ The product can be damaged, or you may be electrocuted.
- In the presence of thunder and lightning, never touch the power cord and signal cable because it can be very dangerous.
  - ▶ It can cause electric shock.
- Do not connect several extension cords, electrical appliances or electrical heaters to a single outlet. Use a power bar with a grounding terminal designed for exclusive use with the computer.
  - ▶ A fire can break out due to overheating.
- Do not touch the power plug with wet hands. Additionally, if the cord pin is wet or covered with dust, dry the power plug completely or wipe dust off.
  - ▶ You may be electrocuted due to excess moisture.
- If you don't intend to use the product for a long time, unplug the power cable from the product.
  - ▶ Covering dust can cause a fire, or insulation deterioration can cause electric leakage, electric shock or fire.
- Fix the power cable completely.
  - ▶ If the power cable is not fixed completely, a fire can break out.
- Do not insert a conductor (like a metal chopstick) into one end of the power cable while the other end is connected to the input terminal on the wall. Additionally, do not touch the power cable right after plugging into the wall input terminal.
  - ▶ You may be electrocuted.
- The appliance coupler is used as the disconnect device.
- Please make sure the device is installed near the wall outlet to which it is connected and that the outlet is easily accessible.
- As long as this unit is connected to the AC wall outlet, it is not disconnected from the AC power source even if the unit is turned off.

CAUTION

- Be sure to keep the outlet, AC adapter, and pins of the power plug clean from dust and etc.
  - ▶ This may cause a fire.
- Do not unplug the power cord while the product is in use.
  - ▶ Electrical shock can damage the product.
- Use only the power cord supplied with the unit. If you use another power cord, make sure that it is certified by the applicable national standards when not provided by the supplier. If the power cable is faulty in any way, please contact the manufacturer or the nearest authorized repair service provider for a replacement.

Precautions in moving the product

WARNING

- Make sure to turn off the product.
  - ▶ You may be electrocuted or the product can be damaged.
- Make sure to remove all cables before moving the product.
  - ▶ You may be electrocuted or the product can be damaged.
- Make sure the panel faces forward and hold it with both hands to move. If you drop the product, the damaged product can cause electric shock or fire. Contact an authorized the service center for repair.
- Make sure the product is turned off, unplugged and all cables have been removed. It may take 2 or more people to carry larger apparatus. Do not press against or put stress on the front panel of the apparatus.

CAUTION

- Do not shock the product when moving it.
  - ▶ You may be electrocuted or the product can be damaged.
- Do not dispose the product-packing box. Use it when you move.

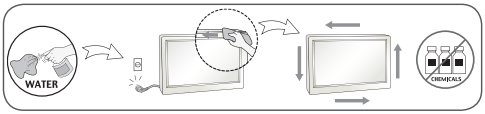
Precautions in using the product

WARNING

- Do not disassemble, repair or modify the product at your own discretion.
  - ▶ Fire or electric shock accident can occur.
  - ▶ Contact the service center for check, calibration or repair.
- When the display is to be left unattended for an extended period of time, unplug it from the wall outlet.
- Keep the product away from water.
  - ▶ Fire or electric shock accident can occur.
- Do not shock or scratch the front and sides of the screen with metallic objects.
  - ▶ Otherwise, it may cause damage to the screen.
- Avoid high temperatures and humidity.

CAUTION

- Do not put or store inflammable substances near the product.
  - ▶ There is a danger of explosion or fire due to careless handling of the inflammable substances.
- When cleaning the product, unplug the power cord and scrub gently with a soft cloth to prevent scratching. Do not clean with a wet cloth or spray water or other liquids directly onto the product. An electric shock may occur. (Do not use chemicals such as benzene, paint thinners or alcohol)
- Take a rest from time to time to protect your vision.
- Keep the product clean at all times.
- Take a comfortable and natural position when working with a product to relax the muscles.
- Take a regular break when working with a product for a long time.
- Do not press strongly upon the panel with a hand or sharp object such as nail, pencil or pen, or make a scratch on it.
- Keep the proper distance from the product.
  - ▶ Your vision may be impaired if you look at the product too closely.
- Set the appropriate resolution and clock by referring to the User's Guide.
  - ▶ Your vision can be impaired.
- Use authorized detergent only when cleaning the product. (Do not use benzene, thinner or alcohol.)
  - ▶ Product can be deformed.
- Do not expose to dripping or splashing and do not place objects filled with liquids, such as vases, cups, etc. on or over the apparatus (e.g. on shelves above the unit).
- Batteries should not be exposed to excessive heat. For example, keep away from direct sunlight, open fireplace and electric heaters.
- Do NOT place non-rechargeable batteries in charging device.
- Using headsets (earphones) for a long time or listening loudly can cause damage to your hearing.
- Spray water onto a soft cloth 2 to 4 times, and use it to clean the front frame; wipe in one direction only. Too much moisture may cause staining.



- Do not use products using high voltage around the Monitor. (e.g., a bug zapper)
  - ▶ Monitor may have malfunction as its electrical shock.

Mounting on a wall

- Do NOT install this product by yourself as you may injure yourself or cause damage to product. Please contact Service personnel authorised by Manufacturer.

LICENSES

Supported licenses may differ by model. For more information of the licenses, *visit www.lg.com*.

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NOTE

- The warranty will not cover any damage caused by using the product in an excessively dusty environment.

ASSEMBLY AND PREPARATION

CAUTION

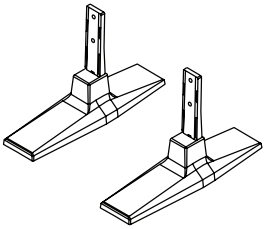
- Always use genuine components to ensure safety and product performance.
- The product warranty will not cover damage or injury caused by the use of counterfeit components.

NOTE

- The accessories provided with your product may vary depending on the model or region.
- Product specifications or contents in this manual may be changed without prior notice due to upgrade of product functions.
- SuperSign Software & Manual
  - Downloading from the LG Electronics website.
  - Visit the LG Electronics website (*www.lgecommercial.com/supersign*) and download the latest software for your model.

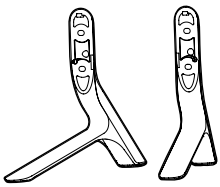
Optional Accessories

Without prior notice, optional accessories are subject to change to improve the performance of the product, and new accessories may be added. The illustrations in this manual may differ from the actual product and accessories.



Stand

ST-201T	**49UH5B/55UH5B**



Stand

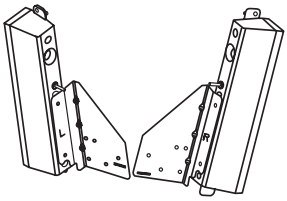
ST-651T	**65UH5B**

Screws

Diameter 4.0 mm x Pitch 0.7 mm

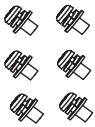
Model	Length (including spring washer)	Quantity
49UH5B	**14 mm**	**4 EA**
55UH5B	**14 mm**	**4 EA**
65UH5B	**14 mm**	**4 EA**

Stand kit



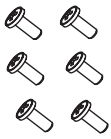
Speakers
SP-5200

Cable holder/
Cable Tie



Screws

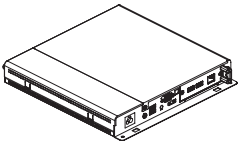
Diameter 4.0 mm x Pitch 0.7 mm x Length 8 mm (including spring washer)



Screws

Diameter 4.0 mm x Pitch 1.6 mm x Length 10 mm

Speaker kit

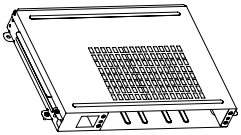


Media Player
MP500/ MP700

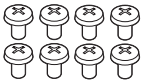
Screws

CD (Owner's Manual)/
Cards

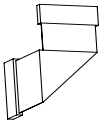
Media Player kit



KT-OPSA



Screws

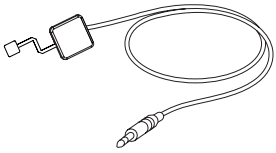


Connecting
Cable

Card
(Easy Setup Guide)

Power Cord

OPS kit



KT-SP0

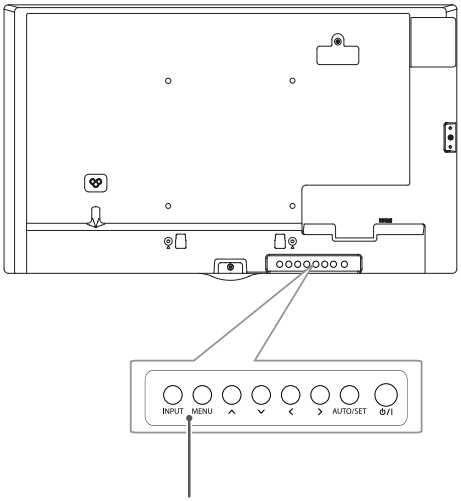
Pixel sensor kit

NOTE

- Cable holder/cable tie may not be available in some areas or for some models.
- Optional accessories are available for some models. If necessary, please purchase them separately.
- Pixel sensor is sold separately. You can obtain additional accessories from your local retail store.
- Before you attach the OPS kit or Media Player, connect the cable to the port.

Parts and Buttons

- The image may be different according to the model.

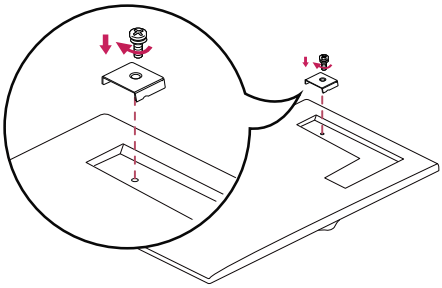


- **INPUT**:Changes the input source.
- **MENU**: Accesses the main menus, or saves your input and exits the menus.
- ∧ ∨: Adjust the up and down.
- < >: Moves left and right.
- **AUTO/SET**: Displays the current signal and mode.
- ⏻/I: Turns the power on or off.

Assembling the Memory Cover

Assemble the cover with a screw as illustrated to prevent the USB memory from theft.

1



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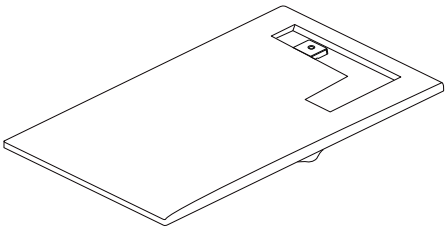
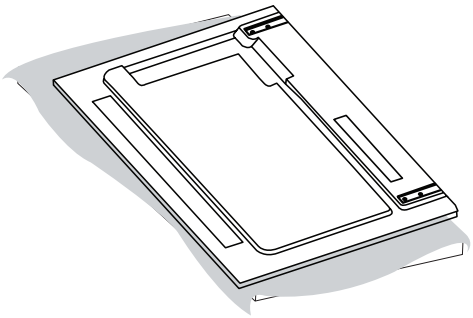


Connecting the Stand

- For certain models only.
- The image may be different according to the model.

49UH5B 55UH5B

1



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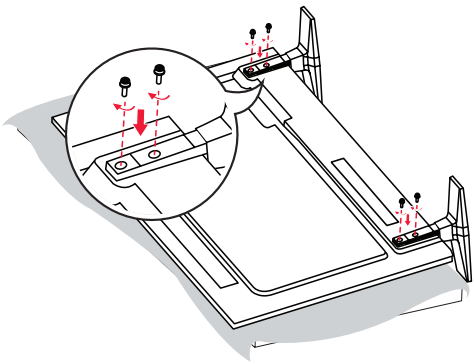
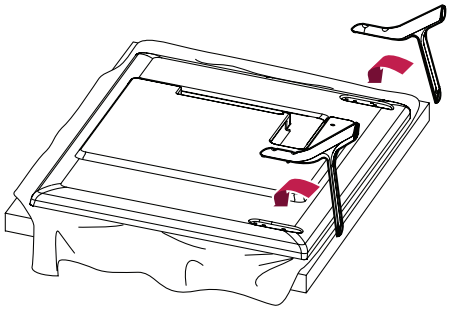
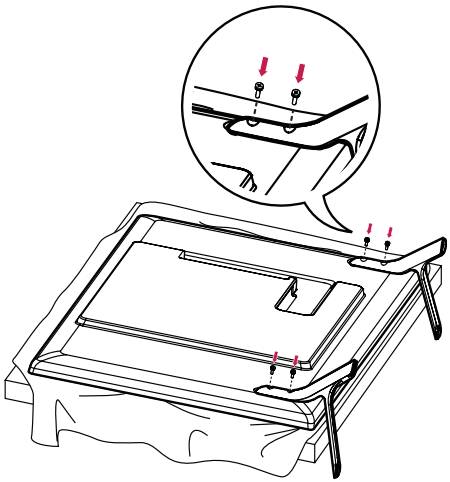


65UH5B

1



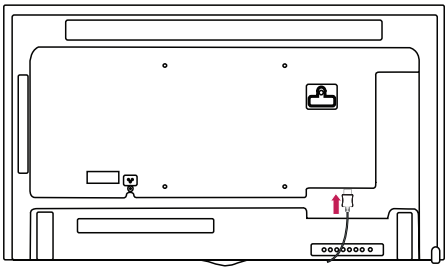
2



Connecting the Speakers

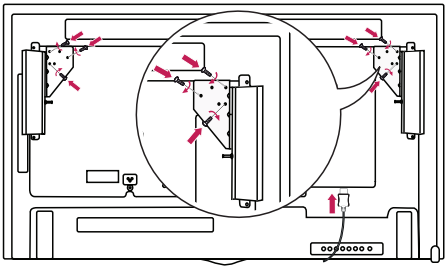
- For certain models only.
- The image may be different according to the model.

1 Connect an input signal cable before installing the speakers.

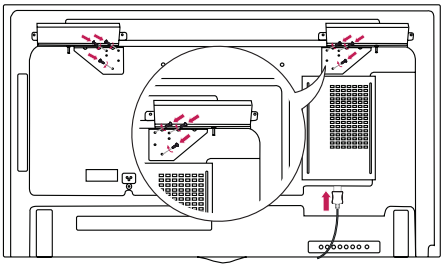


2 Mount the speakers by using screws as shown below. Make sure the power cable is disconnected before making a connection.

Basic installation

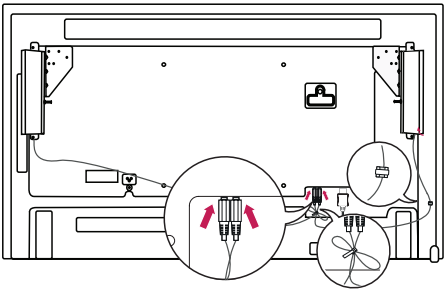


Installation with OPS connected

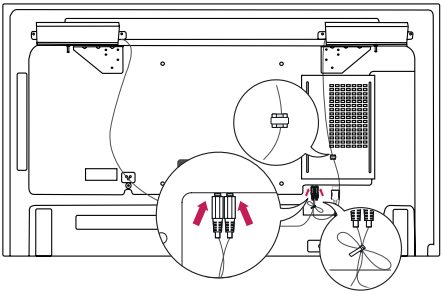


3 Then connect the speaker cable. After installing your speakers, use holders and cable ties to organize the speaker cables.

Basic installation



Installation with OPS connected



NOTE

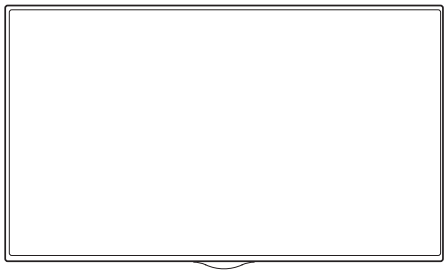
- Please turn off the power before removing the cable. Connecting or removing the speaker cable while turned on may result in no sound.

Connecting the IR Sensor

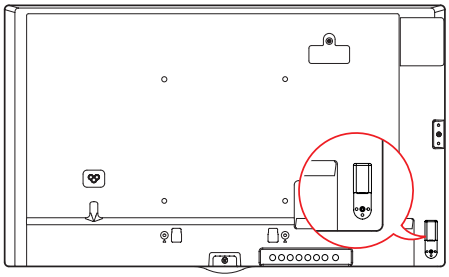
When you connect the cable to the product, the feature for receiving remote control signals is activated. Rotate the IR sensor according to the screen orientation (Landscape/Portrait).

- The image may be different according to the model.

Basic installation

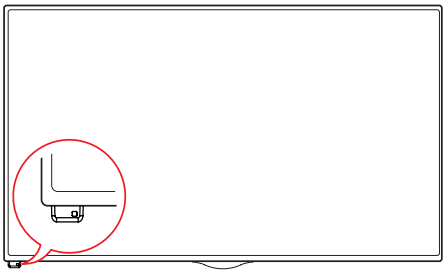


<Front>

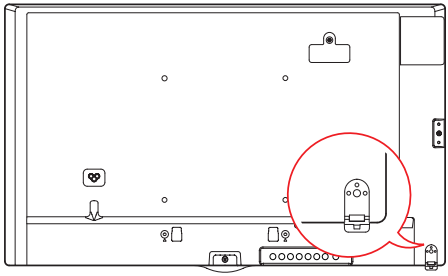


<Rear>

Landscape scene

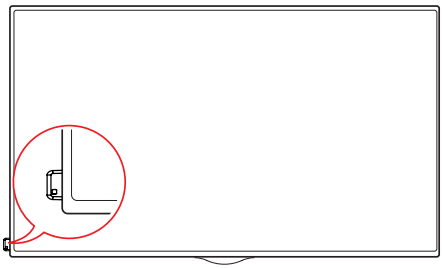


<Front>

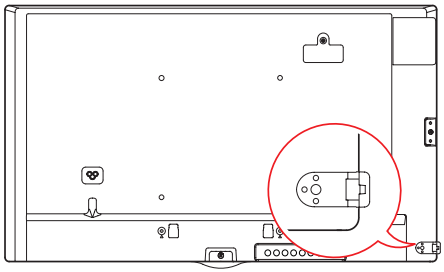


<Rear>

Portrait scene



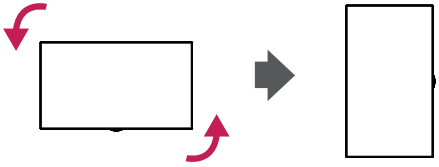
<Front>



<Rear>

Portrait Layout

When installing in a portrait layout, rotate the monitor counterclockwise 90 degrees (when facing the screen).

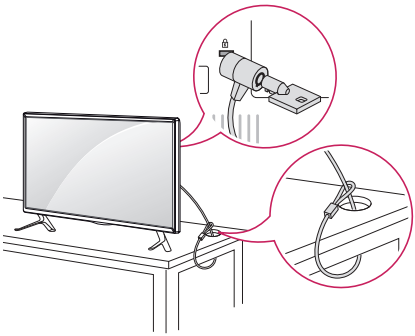


Using Kensington Lock

(This is not available for all models.)

The Kensington security system connector is located at the back of the monitor. For more information on installation and use of this system, refer to the manual provided with the Kensington security system or visit *http://www.kensington.com*.

Connect the Kensington security system cable between the monitor and a table.



NOTE

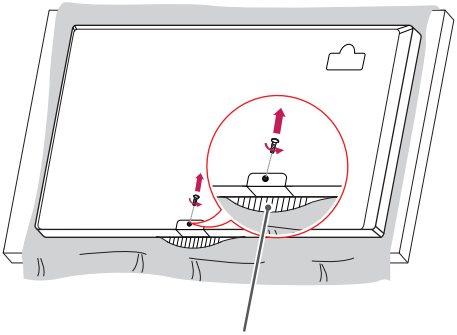
- The Kensington security system is optional. You can obtain additional accessories from most electronics retail stores.

Attaching and removing the LG Logo Bracket

- For certain models only.
- The image may be different according to the model.

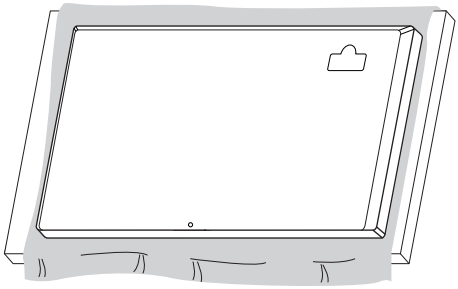
Removing the LG Logo

1 Lay a clean cloth on the floor, and then put the monitor on it with the screen face down. Using a screwdriver, remove the screw that secures the LG Logo Bracket to the bottom rear of the monitor.



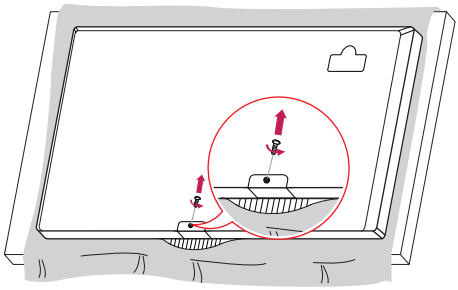
LG Logo Bracket

2 After removing the screw, remove the LG Logo. When re-attaching the LG Logo, repeat the process in reverse order.

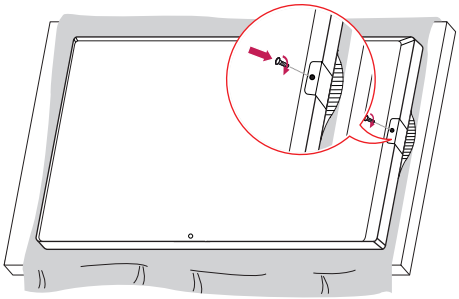


Attaching the LG Logo on the right side

1 Lay a clean cloth on the floor, and then put the monitor on it with the screen face down. Using a screwdriver, remove the screw that secures the LG Logo Bracket to the bottom rear of the monitor.

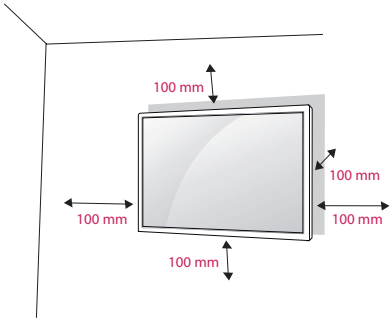


2 After removing the screw, remove the LG Logo. Attach the LG Logo Bracket with a screw, aligning it with the hole on the right side.



Installing on a Wall

For proper ventilation, allow a clearance of 100 mm on each side and from the wall. Detailed installation instructions are available from your dealer, see the optional Tilt Wall Mounting Bracket Installation and Setup Guide.



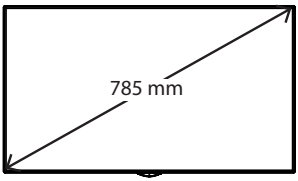
To install your monitor on a wall, attach a wall mounting bracket (optional part) to the back of the monitor.

Make sure that the wall mounting bracket is securely fixed to the monitor and to the wall.

1. Use only screws and wall mounting brackets that conform to VESA standards.
2. Screws which are longer than standard length may damage the inside of the monitor.
3. A non-VESA standard screw may damage the product and cause the monitor to fall. LG Electronics is not liable for any accidents related to the use of non-standard screws.
4. Please use VESA standard as below.

- 785 mm and above

* Fixing screws: Diameter 6.0 mm x Pitch 1.0 mm x Length 12 mm



CAUTION

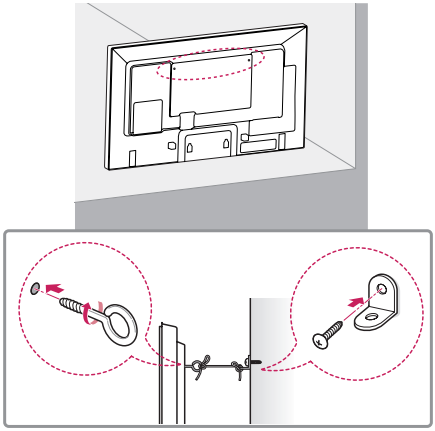
- Disconnect the power cord before moving or installing the monitor to avoid risk of electric shock.
- If you install the monitor on a ceiling or slanted wall, it may fall and result in injury. Use an authorized LG wall mount and contact your local dealer or qualified personnel to assist with the installation.
- Do not over tighten the screws as this may damage the monitor and void your warranty.
- Use only screws and wall mounting brackets that meet the VESA standard. Any damage or injuries caused by misuse or use of improper accessories are not covered by the warranty.
- To prevent injury, this apparatus must be securely attached to the wall in accordance with the installation instructions. (This pertains only to Australia and New Zealand.)

NOTE

- The wall mount kit includes the installation guide and all necessary parts.
- The wall mounting bracket is optional. You can obtain additional accessories from your local dealer.
- The length of screws required may differ depending on the wall mount. Be sure to use the correct length.
- For more information, please refer to the guide provided with the wall mount.

Securing the monitor to a wall (optional)

(Procedure may differ depending on the model.)



1 Insert and tighten the eyebolts, or brackets and bolts on the back of the monitor.

- If there are already bolts inserted in the eyebolts' position, remove the other bolts first.

2 Mount the wall brackets with the bolts to the wall. Match the location of the wall bracket and the eyebolts on the rear of the monitor.

3 Connect the eyebolts and wall brackets tightly with a sturdy cord.
Make sure the securing cord is horizontal with the flat surface.

WARNING

- If the monitor is not positioned in a sufficiently stable location, there is a danger that it will fall. Many injuries, particularly to children, can be avoided by taking simple precautions such as:
  - » Using cabinets or stands recommended by the manufacturer.
  - » Only using furniture that can safely support the monitor.
  - » Ensuring the monitor is not overhanging the edge of the supporting furniture.
  - » Not placing the monitor on tall furniture (for example, cupboards or bookcases) without anchoring both the furniture and the monitor to a suitable support.
  - » Not placing cloth or other materials between the monitor and supporting furniture.
  - » Educating children about the dangers of climbing on furniture to reach the monitor or its controls.

CAUTION

- Make sure that children do not climb on or hang from the monitor.

NOTE

- Use a platform or cabinet that is large and strong enough to support the monitor securely.
- Brackets, bolts, and cords are sold separately. You can obtain additional accessories from your local retail store.
- The illustration shows a general example of installation and may look different from the actual product.

REMOTE CONTROL

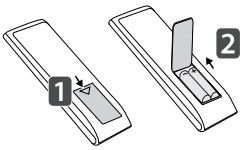
The descriptions in this manual are based on the buttons on the remote control. Please read this manual carefully to use the monitor correctly.

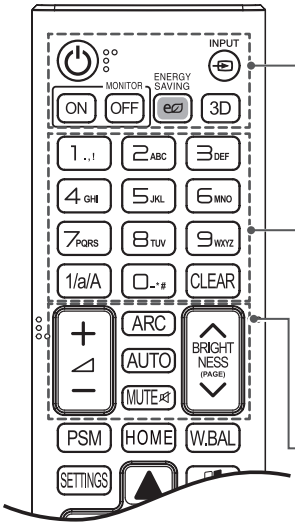
To install batteries, open the battery cover, place batteries (1.5 V AAA) matching ⊕ and ⊖ terminals to the labels inside the compartment, and close the battery cover.

To remove the batteries, perform the installation actions in reverse. The illustrations may differ from the actual accessories.

CAUTION

- Do not mix old and new batteries, as this may damage the remote control.
- Be sure to point the remote control toward the remote control sensor on the monitor.





(POWER) Turns the monitor on or off.

MONITOR ON Turns the monitor on.

MONITOR OFF Turns the monitor off.

ENERGY SAVING(ED) Adjusts the brightness of the picture to reduce energy consumption.

INPUT Selects the input mode.

3D Used for viewing 3D videos. (This model does not support this.)

1/a/A Toggles between numerical and alphabetical. (Depending upon the model, this feature may not be supported.)

Number and Alphabet buttons
Enters numerical or alphabetical characters depending upon the setting. (Depending upon the model, this feature may not be supported.)

CLEAR Deletes the entered numerical or alphabetical character. (Depending upon the model, this feature may not be supported.)

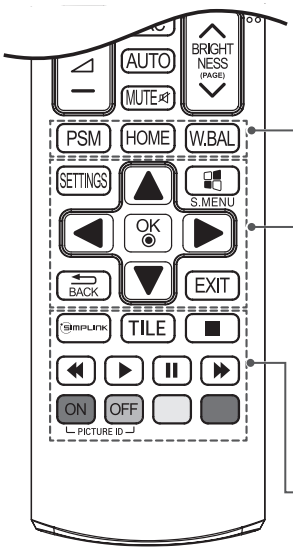
Volume Up/Down Button Adjusts the volume.

ARC Selects the Aspect Ratio mode.

AUTO Automatically adjusts picture position and minimizes image instability (available for RGB input only).(Depending upon the model, this feature may not be supported.)

MUTE Mutes all sounds.

BRIGHTNESS Adjusts the brightness of the display. PAGE Function is not supported in the this model. (Depending upon the model, this feature may not be supported.)



PSM Selects the Picture Mode.
HOME Activates the Launcher.
W.BAL Enters the White Balance menu.

SETTINGS Accesses the main menus or saves your input and exit menus.
S.MENU SuperSign menu key (Depending upon the model, this feature may not be supported.)
Navigation Buttons Scrolls through menus or options.
OK Selects menus or options and confirms your input.
BACK Allows you to move back one step in the user interaction function.
EXIT Quit all OSD tasks and applications.

SIMPLINK Allows you to control various multimedia devices to enjoy multimedia simply by using the remote control through the SimpLink menu. (Depending upon the model, this feature may not be supported.)
TILE Selects the TILE Mode.
PICTURE ID ON/OFF When the Picture ID number matches the Set ID number, you can control whichever monitor you want in multi-display format.
USB Menu Control Buttons Controls media playback.

MAKING CONNECTIONS

You can connect various external devices to your monitor. Change the input mode and select the external device you want to connect. For more information about external device connections, see the user manual provided with each device.

Connecting to a PC

Some of the cables are not provided.

This monitor supports the Plug & Play* feature.

* Plug & Play: a feature that enables a PC to recognize devices attached by the user without device configuration or user intervention when powering up.

External Device Connection

Connect a HD receiver, DVD, or VCR player to the monitor and select an appropriate input mode.

Some of the cables are not provided. For the best picture and sound quality, connecting external devices to your monitor using HDMI cables is recommended.

NOTE

- For the best image quality, using the monitor with HDMI connection is recommended.
- To comply with the specifications of the product, use a shielded interface cable with ferrite core, such as a D-sub 15-pin cable and DVI-D/HDMI cable.
- If you turn the monitor on when the set is cold, the screen may flicker. This is normal.
- Sometimes red, green, or blue spots may appear on the screen. This is normal.
- Use a High Speed HDMI®/™ cable.
- Use a certified cable with the HDMI logo attached. If you do not use a certified HDMI cable, the screen may not display or a connection error may occur.
- Recommended HDMI Cable Types
  - High-Speed HDMI®/™ Cable
  - High-Speed HDMI®/™ Cable with Ethernet
- If you cannot hear any sound in HDMI mode please check your PC settings. Some PCs require you to manually change the default audio output to HDMI.
- If you want to use HDMI-PC mode, you must set your PC/DTV to PC mode.
- You may experience compatibility issues if you use HDMI-PC mode.
- Make sure the power cable is disconnected.
- If you connect a gaming device to the monitor, use the cable provided with the gaming device.
- It is recommended to use the speakers that are provided as optional accessories.
- High Speed HDMI®/™ cables transmit a HD signal up to 1080p and higher.
- HDMI (4K @ 60 Hz) input ports: When using HDMI (4K @ 60 Hz) input port, use the provided HDMI cable.
- When using an HDMI cable that was not provided, please use a high-speed HDMI cable(shorter than 3 meters).

CAUTION

- Connect the signal input cable and tighten it by turning the screws clockwise.
- Do not press the screen with your finger for a prolonged period as this may result in temporary distortion on the screen.
- Avoid displaying static images on the screen for a long period of time to prevent image burn. Use a screensaver if possible.
- A wireless communication device near your monitor can affect the image.

Using the Input List

HOME →

- RGB -> HDMI -> DVI-D -> DISPLAYPORT -> OPS

TROUBLESHOOTING

No image is displayed

Problem	Action
Is the product power cord connected?	• Check if the power cord is correctly plugged into the power outlet.
Does the "Invalid Format" message appear?	• The signal from the PC (video card) is out of the vertical or horizontal frequency range of the product. Adjust the frequency range by referring to the Specifications in this manual.
Does the "No Signal" message appear?	• The signal cable between PC and product is not connected. Check the signal cable. • Press the INPUT menu in the remote Control to check the input signal.

The Unknown Product message appears when the product is connected.

Problem	Action
Did you install the driver?	• Check if the Plug & Play function is supported by referring to the video card user manual.

The screen image looks abnormal.

Problem	Action
Is the screen position wrong?	• Check if the video card resolution and frequency are supported by the product. If the frequency is out of range, set to the recommended resolution in the Control Panel Display Setting menu.
The screen is displayed abnormally.	• The proper input signal is not connected to the signal port. Connect the signal cable that matches with the source input signal.

After-image appears on the product.

Problem	Action
After-image appears when the product is turned off.	• If you use a fixed image for a long time, the pixels may be damaged. Use the screen-saver function. • When a dark image is displayed on the screen after an image with high contrast (black and white or gray), this may cause image sticking. This is normal for LCD screen products.

The audio function does not work.

Problem	Action
No sound?	• See if the audio cable is connected properly. • Adjust the volume. • See if the sound is set properly.
Sound is too dull.	• Select the appropriate equalizer sound.
Sound is too low.	• Adjust the volume.

Screen color is abnormal.

Problem	Action
Screen has poor color resolution (16 colors).	• Set the number of colors to more than 24 bits (true color). Select Control Panel - Display - Settings - Color Table menu in Windows.
Screen color is unstable or mono-colored.	• Check the connection status of the signal cable. Or, re-insert the PC video card.
Do black spots appear on the screen?	• Several pixels (red, green, white, or black color) may appear on the screen, which can be attributable to the unique characteristics of the LCD panel. This is not a malfunction of the LCD.

The operation does not work normally.

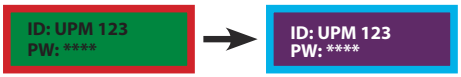
Problem	Action
The power suddenly turned off.	• Is the **Timer** set? • Check the power control settings. Power interrupted.

CAUTION

- Image sticking does not occur when using constantly changing images but may occur when using a fixed image for an extended period of time. Therefore, it is recommended that you use the instructions below to decrease the likelihood of image sticking occurring when using a fixed image. It is recommended that you change the screen at least once every **12 hours** at the very minimum; if done more frequently, the prevention of image sticking is more effective.

Recommended operating conditions

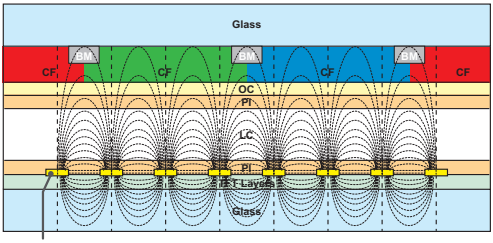
1 Change the background and the character colors using the same time interval.



When changing colors, using complementary colors helps to prevent image sticking.

2 Change the image using the same time interval.

Make sure that the characters or images before changing the image remain in the same location after changing the image.



ITO or MoTi Pixel Layer

What is image sticking?

When the LCD panel displays a static image for an extended period of time, it can cause a voltage difference between the electrodes that operate the liquid crystals. When the voltage difference between the electrodes builds up over time, liquid crystals have a tendency to remain aligned in one direction. During this process, a previously displayed image remains visible. This phenomenon is referred to as image sticking.

PRODUCT SPECIFICATIONS

The product specifications below may be changed without prior notice due to upgrade of product functions.

LCD screen	Screen type	Thin Film Transistor (TFT) Liquid Crystal Display (LCD) Screen
Video signal	Maximum resolution	HDMI : 3840 x 2160 @ 60 Hz Displayport : 3840 x 2160 @ 30 Hz DVI-D/OPS/RGB : 1920 x 1080 @ 60 Hz - This may not be supported on some OS or graphic card types.
	Recommended resolution	HDMI : 3840 x 2160 @ 60 Hz Displayport : 3840 x 2160 @ 30 Hz DVI-D/OPS/RGB : 1920 x 1080 @ 60 Hz - This may not be supported on some OS or graphic card types.
	Horizontal frequency	RGB : 30 kHz to 83 kHz DVI-D/ Displayport : 30 kHz to 83 kHz HDMI : 30 kHz to 135 kHz
	Vertical frequency	RGB : 56 Hz to 75 Hz HDMI/ DVI-D/ DisplayPort : 30 Hz to 60.31 Hz
	Synchronization	Separate Sync, Digital
Input/output ports		SD, USB, LAN, RGB IN, DP In/Out, DVI-D IN, Speaker OUT, IR&Pixel Sensor, HDMI, RS-232C In/Out, Audio In/Out
Embedded battery		Applied
Environmental Conditions	Operating Temperature Operating Humidity	0 °C to 40 °C 10 % to 80 %
	Storage Temperature Storage Humidity	-20 °C to 60 °C 5 % to 95 %

*** Applicable only for models that support the speakers**

Audio/AUDIO	RMS Audio Output	10 W + 10 W (R + L)
	Input Sensitivity	0.7 Vrms
	Speaker Impedance	6 Ω

~ refers to alternating current (AC), and ⎓ refers to direct current (DC).

49UH5B

LCD screen	Pixel pitch	0.27963 mm (H) x 0.27963mm (V)
Power	Rated power	AC 100-240 V~ 50/60 Hz 1.2 A
	Power consumption	On Mode: 102 W Typ. Sleep Mode (RGB, DVI-D, HDMI): ≤ 1.0 W Sleep Mode(DISPLAYPORT): ≤ 0.5 W Off Mode: ≤ 0.5 W
Dimensions (Width x Height x Depth) / Weight	Head	1103.2 mm x 648 mm x 38.6 mm / 13.3 kg
	Head + Stand	1103.2 mm x 714.1 mm x 298.3 mm / 14.8 kg
	Head + Speaker	1103.2 mm x 648 mm x 86.6 mm / 14 kg
	Head + Speaker + Stand	1103.2 mm x 714.1 mm x 298.3 mm / 15.5 kg

55UH5B

LCD screen	Pixel pitch	0.315 mm (H) x 0.315 mm (V)
Power	Rated power	AC 100-240 V~ 50/60 Hz 1.4 A
	Power consumption	On Mode: 116 W Typ. Sleep Mode (RGB, DVI-D, HDMI): ≤ 1.0 W Sleep Mode(DISPLAYPORT): ≤ 0.5 W Off Mode: ≤ 0.5 W
Dimensions (Width x Height x Depth) / Weight	Head	1239.8 mm x 725.2 mm x 38.6 mm / 16.6 kg
	Head + Stand	1239.8 mm x 788.8 mm x 298.3 mm / 18.1 kg
	Head + Speaker	1239.8 mm x 725.2 mm x 86.6 mm / 17.3 kg
	Head + Speaker + Stand	1239.8 mm x 788.8 mm x 298.3 mm / 18.8 kg

65UH5B

LCD screen	Pixel pitch	0.372mm (H) x 0.372 mm (V)
Power	Rated power	AC 100-240 V~ 50/60 Hz 1.5 A
	Power consumption	On Mode: 134 W Typ. Sleep Mode (RGB, DVI-D, HDMI): ≤ 1.0 W Sleep Mode(DISPLAYPORT): ≤ 0.5 W Off Mode: ≤ 0.5 W
Dimensions (Width x Height x Depth) / Weight	Head	1458.6 mm x 848.9 mm x 40.1 mm / 26 kg
	Head + Stand	1458.6 mm x 915.8 mm x 313.9 mm / 27.4 kg
	Head + Speaker	1458.6 mm x 848.9 mm x 87.1 mm / 26.7 kg
	Head + Speaker + Stand	1458.6 mm x 915.8 mm x 313.9 mm / 28.1 kg

Wireless module(LGSBW41)Specifications			
Wireless LAN		Bluetooth	
Standard	IEEE 802.11a/b/g/n	Standard	Bluetooth Version 4.0
Frequency range	2400 to 2483.5 MHz 5150 to 5250 MHz 5725 to 5850 MHz(for Non EU)	Frequency range	2400 to 2483.5 MHz

*Because band channel used by the country could be different, the user can not change or adjust the operating frequency and this product is set for the regional frequency table.

*This device should be installed and operated with minimum distance 20 cm between the device and your body. And this phrase is for the general statement for consideration of user environment.

CE 0197 !

(Only HongKong)

Wireless module(LGSBW41)Specifications			
Wireless LAN		Bluetooth	
Standard	IEEE 802.11a/b/g/n	Standard	Bluetooth Version 4.0
Frequency range	2400 to 2483.5 MHz 5150 to 5250 MHz 5725 to 5850 MHz	Frequency range	2400 to 2483.5 MHz

*Because band channel used by the country could be different, the user can not change or adjust the operating frequency and this product is set for the regional frequency table.

*This device should be installed and operated with minimum distance 20 cm between the device and your body. And this phrase is for the general statement for consideration of user environment.

RGB (PC) Support Mode

Resolution	Horizontal frequency (kHz)	Vertical frequency (Hz)
720 x 400	31.468	70.8
640 x 480	31.469	59.94
800 x 600	37.879	60.317
1024 x 768	48.363	60.0
1280 x 720	44.772	59.855
1600 x 900	60	60
1280 x 1024	63.981	60.02
1680 x 1050	65.29	59.954
1920 x 1080	67.5	60

HDMI / DVI-D / DISPLAYPORT / OPS (PC) Support Mode

Resolution	Horizontal frequency (kHz)	Vertical frequency (Hz)	Remark
800 x 600	37.879	60.317	
1024 x 768	48.363	60	
1280 x 720	44.772	59.855	
1366 x 768	47.7	60	
1280 x 1024	63.981	60.02	
1680 x 1050	65.29	59.954	
1920 x 1080	67.5	60	
3840 x 2160	67.5	30	HDMI/ Displayport
3840 x 2160	135	60	HDMI

HDMI / DISPLAYPORT / OPS (DTV) Support Mode

Resolution	Horizontal frequency (kHz)	Vertical frequency (Hz)	Remark
480/60p	31.5	60	
576/50p	31.25	50	
720/50p	37.5	50	
720/60p	45	60	
1080/50i	28.1	50	
1080/60i	33.75	60	
1080/50p	56.25	50	
1080/60p	67.432	59.94	
1080/60p	67.5	60	
2160/30p	67.5	30	HDMI/ Displayport
2160/50p	112.5	50	HDMI
2160/60p	135	60	HDMI

NOTE

- PC resolutions available for the Input Label option in RGB / HDMI / DVI-D / DISPLAYPORT input modes: 640 x 480/60 Hz, 1280 x 720/60 Hz, 1920 x 1080/60 Hz, 3840 x 2160 / 60Hz; 480p, 720p,1080p and 2160p DTV resolutions.
- Vertical frequency: The product display functions by the screen image changing dozens of times every second like a fluorescent lamp. The vertical frequency or refresh rate is the number of image displays per second. The unit is Hz.
- Horizontal frequency: The horizontal interval is the time taken to display one horizontal line. When 1 is divided by the horizontal interval, the number of horizontal lines displayed every second can be tabulated as the horizontal frequency. The unit is kHz.

Make sure to read the Safety Precautions before using the product.
The model and serial numbers of the SET are located on the back and one side of the SET. Record it below should you ever need service.

MODEL _____

SERIAL _____

WARNING -This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

Temporary noise is normal when powering ON or OFF this device.

ENGLISH

Service

Unplug the monitor from the wall outlet and refer servicing to qualified service personnel when :

- The power cord or plug is damaged or frayed.
- Liquid has been spilled into the monitor.
- The monitor has been exposed to rain or water.
- The monitor does not operate normally following the operating instructions. Adjust only those controls that are covered in the operating instructions. An improper adjustment of other controls may result in damage and often requires extensive work by a qualified technician to restore the monitor to normal operation.
- The monitor has been dropped or the cabinet has been damaged.
- The monitor exhibits a distinct change in performance.
- Snapping or popping from the monitor is continuous or frequent while the monitor is operating. It is normal for some monitors to make occasional sounds when being turned on or off, or when changing video modes.

Do not attempt to service the monitor yourself, as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

DEUTSCH

Wartun

Bei folgenden Fehlerbedingungen ist der Netzstecker des Monitors zu ziehen und der Kundendienst zu benachrichtigen:

- Wenn der Netzstecker beschadigt oder das Netzkabel ausgefranst ist.
- Wenn Flussigkeit in den Monitor gelaufen ist.
- Wenn der Monitor Regen oder Feuchtigkeit ausgesetzt worden ist.
- Wenn der Monitor trotz Befolgung aller Bedienungsanweisungen nicht ordnungsgemass arbeitet. Benutzen Sie ausschliesslich die Bedienelemente, die in den Hinweisen dieses Handbuchs beschrieben werden. Werden andere Bedienelemente geandert oder verstellt, konnen Schaden entstehen, die nur von einem qualifizierten Service-Techniker behoben werden konnen.
- Wenn der Monitor fallengelassen und das Gehause beschadigt wurde.
- Wenn beim Betrieb des Monitors haufig oder lang anhaltend knackende oder knallende Nebengerausche auftreten. Hiermit sind nicht die typischen Gerausche gemeint, die beim Ein- oder Ausschalten des Monitors zu horen sind.

Fuhren Sie keine Wartungsarbeiten selbst durch. Durch Offnen oder Entfernen wichtiger Abdeckungen werden spannungsfuhrende Teile freigelegt, so dass eine erhohte Gefahrdung besteht. Fur Wartungsarbeiten in diesen Bereichen ist der Kundendienst zustandig.

FRANÇAIS

Maintenance du Moniteur

Débranchez le moniteur (prise murale) et contactez un technicien qualifié de maintenance de ce type d'équipement dans les cas suivants:

- Le cordon d'alimentation ou la prise est endommagé(e) ou dénudé.
- Du liquide a coulé à l'intérieur du moniteur.
- Le moniteur a été exposé à la pluie ou à l'humidité.
- Le moniteur ne fonctionne pas normalement lorsque vous suiv ez les instructions du mode d'emploi. Ne réglez que les éléments décrits dans le mode d'emploi. Un Réglage indadapté d'autres éléments peut entraîner une déterioration de l'appareil et nécessite souvent un important travail du technicien qualifié pour remet tre le moniteur en bon état de fonctionnement.
- Le moniteur est tombé ou son boîtier a été endommagé.
- Le moniteur présente un changement net dans ses capacités de fonctionnement.
- Des bruits secs ou des bruits d'encliquetage 'clic' se font enten dre en continu ou fréquemment en cours de fonctionnement du moniteur. Il est normal que certains moniteurs fassent des bruits occasionnels lorsqu'ils sont mis sous tension ou hors tension, ou lors de changements de mode vidéo.

Ne tentez pas de réparer vous-même votre moniteur, car ouvrir le moniteur ou retirer son boîtier peut vous exposer à des décharges électriques dangereuses et présente par ailleurs d'autres risques. Pour toute réparation du moniteur, contactez un technicien qualifié.

ITALIANO

Manutenzione

Staccare il monitor dalla presa elettrica e consultare il personale addetto alla manutenzione quando:

- Il cavo elettrico o la spina sono danneggiati o consumati.
- Si è rovesciato del liquido sul monitor.
- Il monitor è stato esposto alla pioggia o all'acqua.
- Il monitor non funziona correttamente secondo le istruzioni oper ative. Regolare unicamente quei controlli contemplati nelle istruzioni operative. La manomissione di altri controlli può provo care danni e spesso poi è necessario un lungo lavoro da parte dei tecnici specializzati per ripristinare le normali funzionalità del monitor.
- Il monitor è caduto o si è danneggiata la struttura.
- Il monitor funziona in maniera evidentemente diversa da prima.vIl monitor lampeggia in maniera continua o frequente mentre è in funzione. E' normale che alcuni monitor emettano suoni occa sionali quando vengono accesi o spenti, oppure quando si cam bia la modalità video.

Non cercare di effettuare da soli la manutenzione poiché l'apertura della struttura potrebbe esporre l'utente al pericolo di scariche elettriche o ad altri rischi. Rivolgersi al personale tecnico qualificato.

ESPANÕL

Servicio

Desconecte el monitor del tomacorriente de la pared y refiera el servicio a personal de servicio calificado cuando:

- El cable o enchufe de energía está dañado o desgastado.
- Se ha derramado líquido en el monitor.
- El monitor ha sido expuesto a la lluvia o al agua.
- El monitor no funciona normal aunque se hayan seguido las instrucciones de operación. Ajuste sólo los controles que están cubiertos en las instrucciones de operación. Un ajuste incorrecto de estos controles pueden causar daño y a veces requiere de trabajo extenso por un técnico calificado para restaurar el monitor al funcionamiento normal.
- El monitor se ha dejado caer o el gabinete se ha dañado.
- El monitor exhibe un cambio distinto en la ejecución.
- Los chasquidos o explosivos que emanan del monitor son continuos o frecuentes mientras el monitor está operando.
  Los ruidos ocasionales son normales para algunos monitores cuando se prende o se apaga, o cambia el modo de video.

No trate de arreglar usted mismo el monitor, ya que abrir y sacar las tapas pueden exponerlo a niveles de voltaje peligrosos u otros peligros. Refiera el arreglo a un personal técnico calificado para ello.

PORTUGUÊS

Manutenção

Desligue o monitor da tomada e procure por serviço autorizado, quando:

- O cabo de força ou plugue estiver danificado ou rompido.
- Houve queda de líquido no monitor.
- O monitor foi exposto à chuva ou água.
- O monitor não opera normalmente seguindo as instruções de operação. Ajuste somente os controles descritos nas instruções de operação. Uma tentativa de ajuste de outros controles invali-dará a garantia, além de exigir diversas horas de trabalho de pessoal qualificado para restaurar as condições originais de fun-cionamento do monitor.
- O monitor caiu ou está com o gabinete quebrado.
- O monitor exibe uma distinta mudança de performance.
- O monitor emite estalos ou estouros continuamente durante sua operação normal. Para alguns monitores é normal se ouvirem estalos quando se liga ou desliga o monitor ou quando há mudança de modo de vídeo.

Não tente efetuar a manutenção do monitor você mesmo. Abrir ou remover as tampas do gabinete deixarão expostos pontos de alta tensão em diversas partes do monitor. Procure sempre pessoal qualificado para execução de serviços de manutenção.

NEDERLANDS

Onderhoud

In de volgende gevallen haalt u de stekker van de monitor uit het stopcontact en roept u de hulp in van een gekwalificeerde technicus:

- Het netsnoer of de stekker is beschadigd of versleten.
- Er is vloeistof in de monitor gemorst.
- De monitor heeft blootgestaan aan regen of water.
- De monitor werk niet goed, ondanks het feit dat u handelt volgens de gebruiksaanwijzing. Beperk u bij het instellen van de monitor tot de items die in de gebruiksaanwijzing worden besproken. Het onjuist instellen van andere items kan storingen veroorzaken. Vaak is dan een omvangrijke reparatie door een gekwalificeerde technicus nodig, om de monitor weer voor normaal gebruik in gereedheid te brengen.
- De monitor is gevallen of de behuizing is beschadigd.
- De monitor functioneert wezenlijk anders dan normaal het geval is.
- De monitor produceert voortdurend of regelmatig kraak- en knalgeluiden. Bij sommige monitoren is het normaal dat ze af en toe geluiden produceren bij het in- en uitschakelen, of wanneer ze veranderen van videomodus.

Probeer de monitor niet zelf te repareren, aangezien u bij het openen of verwijderen van de behuizing blootgesteld kunt worden aan gevaarlijke elektrische schokken of andere gevaren. Laat alle reparatiewerkzaamheden over aan gekwalificeerde technici.

РУССКИЙ

Ремонт и Обслуживание

В нижеперечисленных случаях отключите монитор от сети и обратитесь в пункты сервисного обслуживания:

- Если Вы повредили кабель питания или вилку.
- Если Вы пролили в монитор какую-нибудь жидкость.
- Если монитор подвергся воздействию воды или дождя.
- Если монитор не работает согласно нормативам, указанным в Инструкции. При этом используйте для регулировки только те кнопки управления, которые предлагаются пользователю в Инструкции. Неправильное манипулирование другими кнопками может привести к повреждению монитора и потребовать дорогостоящего ремонта.
- Если монитор подвергся удару при падении или если был поврежден его корпус.
- Если в мониторе возникли выраженные отклонения от нормального режима работы.
- Если монитор издает во время работы посторонние звуки, хотя для некоторых типов мониторов включение или выключение, как правило, сопровождается какими-либо звуками.

Не пытайтесь проводить самостоятельное техническое обслуживание монитора. Не подвергайте себя опасности воздействия высоких напряжений. Все работы должны выполняться только квалифицированным персоналом.

العربية

الخدمة

افصل الشاشة عن مأخذ الحائط واتصل بفريق خدمة محترف:
- إن سلك الطاقة أو المقبس تالف أو بالٍ.
- انسكب سائل على الشاشة.
- تعرضت الشاشة للمطر أو الماء.
- لا تعمل الشاشة بشكلٍ طبيعي باتباع الإرشادات التالية. اضبط عناصر التحكم المذكورة في إرشادات التشغيل فقط. إذ قد يؤدي الضبط غير الصحيح لبعض عناصر التحكم إلى إلحاق الضرر وغالباً ما قد يتطلب عملاً شاقاً من تقني محترف لإعادة الشاشة إلى وضع التشغيل العادي.
- وقعت الشاشة أو قد تم إتلاف الصندوق.
- أداء الشاشة متغيّر بشكل واضح.
- تصدر الشاشة صوت طقطقة أو فرقعة بشكلٍ متواصل أو متكرر أثناء التشغيل.

من الطبيعي أن تصدر بعض الشاشات أصواتاً مؤقتة عند تشغيلها أو إيقاف تشغيلها، أو عند تغيير أوضاع الفيديو.

لا تحاول صيانة الشاشة بنفسك، إذ قد يعرضك فتح الغطاء أو إزالته لفولتية خطيرة أو غيرها من المخاطر.
خصص أعمال الخدمة والصيانة لفريق الخدمة المحترف.

Maintenance Tel	
Dammam	8339561
Khobar	8942694
Hoffuf	5861262
Jubail	3624444
Riyadh	4652641
Jeddah	6531688
Makkah	5500110
Madina	8274793

日本語

保守および修理

次のような保守になったら、モニターの電源プラグをコンセントから抜き、修理センターにご相談ください。

- 電源コードまたはプラグが破損した、または擦り切れた。
- モニターの内部に液体をこぼしてしまった。
- モニターが雨または水に濡れてしまった。
- 取扱説明書どおりに操作してもモニターにうまく画像が表示されない場合、お客様の方で調整するのは、取扱 説明書で説明されているボタンを使った調整だけにしてください。
- モニターを床に落としてしまった。または、キャビネットを破損してしまった。
- モニターの性能が明らかに落ちてきた。
- モニターも使用中、常にまたは断続的にピシピシといった音やパンといった音がする。ただし、正常な モニターでも、電源を入れたりきったりしたときには音はする場合があります。

モニターのカバーを開いたり取り外したりすると、高電圧による感電その他の危険性があるので、モニターを自分で修理したりしないでください。修理が必要なときは、サービスマンに頼んでください。

警告

ディスプレイの裏ぶたを開けないでください。内部には高電圧の部分があり、感電の恐れがあります。

＊お問い合わせ先については提供されている「修理に関するご案内」カードのサービスセンター案内をご参照ください。

한국어

수리

다음과 같은 경우에는 벽면 콘센트에서 모니터의 플러그를 뺀 다음 자격이 있는 수리 담당자에게 의뢰하십시오.

- 전원코드 또는 플러그가 손상되거나 낡았습니다.
- 액체가 엎질러져서 모니터에 흘러들어갔습니다.
- 모니터가 비 또는 물에 노출되었습니다.
- 모니터가 일반적인 동작지침에 맞게 동작하지 않으며, 동작지침에 설명된 컨트롤만 조정합니다. 다른컨트롤을 잘못 조정하여 손상된 것 같습니다. 모니터가 정상적으로 동작하도록 복원하려면 자격을 갖춘 기술자가 전반적으로 수리해야 합니다.
- 모니터를 떨어뜨렸거나 캐비닛이 손상되었습니다.
- 모니터의 성능이 눈에 띄게 달라졌습니다.
- 모니터가 작동하는 동안 모니터에서 스냅 또는 팝 현상이 계속적으로 또는 자주 발생합니다. 모니터를 켜거나 끌 때 또는 비디오 모드를 변경할 때 일부 모니터에서 소리가 나는 경우가 있는데 이는 정상적인 것입니다.

덮개를 열거나 떼어내는 것은 감전의 우려 및 다른 위험요소가 있으므로 모니터를 직접 수리하려고 하지 마십시오.
모든 수리는 자격을 갖춘 수리 담당자에게 의뢰하십시오.

ENGLISH

Energy Saving Design

This program is designed to have computer equipment manufacturers build circuitry into their products to reduce power consumption when it is not in operation.

When this monitor is used with a PC on which a screen blanking software complying with the VESA Display Power Management Signalling (DPMS) Protocol is installed, it can conserve significant energy by reducing power consumption when it is not in operation.

There are 2 signal lines, 3 modes of operation.
: On Mode, Sleep Mode, Off Mode.

Mode	Definition
On mode	The normal operation. When the monitor is on mode, being connected to a power source, it displays an image.
Sleep Mode	The reduced power state. returns to on mode when the user moves the mouse or presses a key on the keyboard.
Off Mode	The lowest power consumption state. returns to on mode when the user pushes a power switch.

Note

- *The energy saving Design monitors only work while connected to the computers that have energy saving features.*

PORTUGUÊS

Programa de economia de energia

Este programa foi elaborado com a finalidade de estimular os fabricantes de equipamentos para computadores a construírem em seus produtos sistemas que reduzam o consumo de energia quando eles não estiverem em uso.

Quando este monitor for utilizado com um computador cujo software de proteção de tela estiver instalado, em conformidade com o protocolo de gerenciamento de energia Display Power Management Signalling (DPMS) VESA, pode haver uma considerável economia de energia pela redução do consumo elétrico em momentos de ociosidade.

Existem duas linhas de sinal e três modos de operação: Ativado (On), em espera (Sleep) e desativado (Off).

Modo	Definição
Ligado	A operação normal. Quando o monitor estiver ativado e conectado a uma fonte de alimentação, será exibida uma imagem.
Em espera	Estado de baixa energia. Retorna ao modo ativado quando o usuário move o mouse ou pressiona uma tecla no teclado.
Desa-tivado	O estado de menor consumo de energia. Retorna ao modo ativado quando o usuário pressiona algum botão liga/desliga.

Observação

- *Os monitores que incorporam o programa de economia de energia só funcionam apropriadamente se conectados a computadores que possuem recursos de economia de energia.*

한국어

절전디자인

이 프로그램은 컴퓨터 장비 제조업체가 해당 제품에 회로를 내장하여 , 사용하지 않는 기간에 전력 소비를 줄일 수 있도록 만들어졌습니다 .

이 모니터를 VESA DPMS(Display Power Management Signaling) 프로토콜을 준수하는 화면 비움 소프트웨어가 있는 PC 와 함께 사용하면 사용하지 않는 기간에 전력 소비를 줄여서 에너지를 상당히 절약할 수 있습니다 .

두 개의 신호 라인과 세개의 동작모드 [온 모드 , 절전 모드 , 오프 모드) 가 존재합니다 .

모드	정의
온 모드	정상적인 동작상태 . 전원에 연결되어 있고 스크린에 정상적인 이미지를 표시하고 있다 .
절전 모드	컴퓨터로 부터 지시를 받은 후 또는 기타 기능에 의해 모니터의 전력이 저감되는 상태 . 이 모드에서는 스크린에 아무 것도 표시되지 않으며 , 사용자 또는 컴퓨터로 부터의 지령 (마우스 동작 , 키보드 입력) 에 의해 가동 상태인 온 모드로 전환 된다 .
오프 모드	가장 낮은 전력 소비 상태 . 전원 스위치를 이용해 전원을 오프시킨 상태이다 .

참 고

• 모니터 절전 기능은 절전 기능이 있는 컴퓨터에 연결되어 있는 경우에만 사용할 수 있습니다 .

DEUTSCH

Energiespar-Design

Dieses Programm wurde konzipiert, um die Hersteller von Computergeräten zu veranlassen, Schaltungen in ihre Produkte einzubauen, die zu einem geringeren Stromverbrauch führen, wenn das Gerät nicht in Betrieb ist.

Wenn dieser Bildschirm zusammen mit einem PC verwendet wird, auf dem eine Software zur Abschaltung des Bildschirms installiert ist, die dem VESA Display Power Management Signalling (DPMS)-Protokoll entspricht, kann er erheblich Energie sparen, indem er den Stromverbrauch reduziert, wenn er nicht in Betrieb ist.

Es gibt 2 Signalleitungen, 3 Betriebsmodi: Ein Modus, Ruhemodus, Aus Modus.

Modus	Definition
Ein Modus	Der normale Betrieb. Wenn der Bildschirm im Ein Modus ist, zeigt er ein Bild an, sofern er mit einer Stromquelle verbunden ist.
Ruhe-modus	Der reduzierte Energiezustand. Kehrt in den Ein Modus zurück, sobald der Benutzer die Maus bewegt oder eine Taste auf der Tastatur drückt.
Aus Modus	Der Zustand, in dem am wenigsten Energie verbraucht wird. Kehrt in den Ein Modus zurück, sobald der Benutzer einen Stromschalter drückt.

Hinweis:

• *Die Bildschirme mit Energiespar-Design funktionieren nur, wenn sie an Computer mit Energiesparfunktionen angeschlossen sind.*

MAGYAR

Energiatakarékos kialakítás

E program célja, hogy a számítógéptartozék-gyártók azon termékei, amelyek rendelkeznek az ehhez szükséges áramkörrel, alacsony fogyasztással üzemeljenek akkor, amikor nincsenek használatban.

Ha ezt a monitort olyan számítógéppel használja, amelyen VESA képerny+tápellátás-kezel+ jelrendszer (DPMS) protokollt támogató képerny+kikapcsoló szoftver van, jelent+s mennyiség energiát takaríthat meg az áramfelvétel használaton kívüli állapotban való csökkentésével.

2 jelvonal van 3 m ködési móddal:
Bekapcsolt mód, Alvás mód, Kikapcsolt mód.

Mód	Leírás
Bekapcsolt mód	Ez a normál m ködés módja. Amikor a monitor bekapcsolt módban van, és áramforráshoz van csatlakoztatva, egy képet jelenít meg.
Alvás mód	Ez a csökkentett áramfelvétel állapot. A bekapcsolt módba az egér mozgatásával vagy egy billenty lenyomásával térhet vissza.
Kikapcsolt mód	A legkisebb fogyasztással járó állapot. A bekapcsológomb megnyomásával térhet vissza a bekapcsolt állapotba.

Megjegyzés

- *Az energiatakarékos kialakítással készült monitorok csak akkor m ködnek, ha olyan számítógépre csatlakoztatja, amely rendelkezik energiatakarékossági funkciókkal.*

BAHASA INDONESIA

Desain Hemat Energi

Program ini dirancang agar produsen peralatan komputer membangun sistem sirkuit ke dalam produk mereka untuk mengurangi konsumsi daya saat peralatan sedang tidak beroperasi.

Saat monitor ini digunakan dengan komputer PC di mana perangkat lunak pengosong layar yang sesuai dengan Protokol Display Power Management Signalling (DPMS) terinstal, monitor dapat menghemat energi secara signifikan dengan mengurangi konsumsi daya saat sedang tidak beroperasi.

Terdapat 2 saluran sinyal, 3 mode operasi:
Mode On (Menyala), Mode Sleep (Tidur),
Mode Off (Mati).

Mode	Definisi
Mode On	Operasi normal. Saat monitor berada dalam mode on, terhubung dengan sumber daya, monitor menampilkan gambar.
Mode Sleep	Keadaan dengan daya yang dikurangi. kembali ke mode on saat pengguna menggerakkan mouse atau menekan tombol pada keyboard.
Mode Off	Keadaan dengan konsumsi daya terendah. kembali ke mode on saat pengguna menekan tombol daya.

Catatan

- *Monitor dengan desain hemat energi hanya bekerja ketika terhubung dengan komputer yang memiliki fitur hemat energi.*

日本語

省エネ設計
（省エネルギー設計、節電設計）

本プログラムはコンピュータ機器メーカーが製造する製品がその非使用時（非動作時）は消費電力を抑える回路構成を持つことを目的に策定されました。

本モニターを VESA が策定した DPMS(Display Power Management Signaling) プロトコルに準拠した スクリーンブランキング（スクリーンセーバー）ソフトウェアをインストールした PC と一緒にご使用することで、本モニターの非使用時（非動作時）の消費電力を大幅に抑えることができます。

2 つの信号ラインと、3 つの操作モードがあります。操作モードはオンモード、スリープモード、そしてオフモードの3つです。

モード	説明
オン モード	通常の使用時（通常の動作時）モニターがオンモードで電源は接続されているとき画像が表示されます。
スリープモード	省電力の状態です。マウスを働かすかキーボードーのどれかのキーを押すとオンモードに戻ります。
オフ モード	最も消費電力が少ない状態です。電源スイッチを入れるとオンモードに戻ります。

注（ご注意）

・省電力設計のモニターは省電力機能を備えたコンピュータに接続されたときのみ有効です。

ESPAÑOL

Diseño de ahorro de energía

Este programa está diseñado para que los fabricantes de equipos informáticos incorporen sistemas de circuitos a sus productos con el fin de reducir el consumo de energía cuando no esté funcionando el aparato.

Cuando este monitor se utiliza con un PC en el que esté instalado un software de apagado de pantalla que cumpla con el protocolo DPMS (Display Power Management Signalling – señalización de la gestión de la energía de la pantalla) de VESA, se puede ahorrar una importante cantidad de energía reduciendo su consumo cuando no se utiliza.

Hay 2 líneas de señal y 3 modos de funcionamiento:
Modo Encendido, Modo Desconexión automática, Modo Apagado

Modo	Definición
Modo Encendido	Funcionamiento normal. Cuando el monitor se encuentra en el modo encendido, si está conectado a la corriente, muestra una imagen.
Modo Desco-nexión automática	Estado de uso reducido de energía. Vuelve al modo encendido cuando el usuario mueve el ratón o pulsa una tecla del teclado.
Modo Apagado	El estado de menor consumo de energía. Vuelve al modo encendido cuando el usuario pulsa el interruptor.

Nota

- *Los monitores con diseño de ahorro de energía sólo funcionan cuando están conectados a ordenadores con capacidad de ahorro de energía.*

ҚАЗАҚША

Энергия үнемдейтін дизайн

Бұл бағдарлама компьютер жабдықтарын өндірушілерге жұмыс істемей тұрғанда, қуаттың тұтынылуын азайту мақсатымен өнімдеріне электр схемасын енгіздіруге арналған.

Монитор VESA DPMS протоколына сәйкес келетін экранды жабу бағдарламалық құралы орнатылған компьютермен пайдаланылса, ол жұмыс істемей тұрғанда, қуаттың тұтынылуын азайтып, энергияның едәуір мөлшерін сақтайды.

Жұмыстың 2 сигналдық желісі мен 3 режимі бар :
Қосу режимі, Күту режимі, Өшіру режимі.

режимі	Анықтама
Қосу режимі	Қалыпты жұмыс Монитор қуат көзіне жалғанып, қосу режимінде тұрғанда, онда сурет көрсетіледі.
Күту режимі	Пайдаланушы тінтуірді жылжытқанда немесе пернетақтадағы бір пернені басқанда, азайтылған қуат күйі қосу режиміне қайтады.
Өшіру режимі	Пайдаланушы қуат қосқышын басқанда, қуатты тұтынудың ең төменгі күйі қосу режиміне қайтады.

Ескертпе

- *Энергия үнемдейтін дизайнды мониторлар энергияны үнемдеу мүмкіндіктері бар компьютерлерге қосылып тұрғанда ғана жұмыс істейді.*

NEDERLANDS

Energiebesparend ontwerp

Dit programma stimuleert fabrikanten van computerapparatuur om schakelingen in producten te bouwen die het stroomverbruik verminderen als de apparatuur niet wordt gebruikt.

Als deze monitor wordt gebruikt in combinatie met een pc waarop schermuitschakelsoftware is geïnstalleerd die compatible is met het VESA Display Power Management Signalling-protocol (DPMS), kunt u aanzienlijk veel energie besparen door het stroomverbruik te verminderen als de monitor niet wordt gebruikt.

Er zijn 2 signaallijnen en 3 bedrijfsmodi: de aan modus, de slaapmodus en de uit modus.

Modus	Definitie
Aan modus	De normale bedrijfsmodus. Als de monitor in aan modus staat en op een stroombron wordt aangesloten, wordt er beeld weergegeven.
Slaap-modus	De stand voor minder stroomverbruik. Keert terug naar aan modus als de gebruiker de muis beweegt of een toets op het toetsenbord indrukt.
Uit modus	De stand voor het laagste stroomverbruik. Keert terug naar aan modus als de gebruiker een stroomschakelaar indrukt.

Opmerking

- *Monitors met een energiebesparend ontwerp werken alleen als ze worden aangesloten op computers met energiebesparende functies.*

FRANÇAIS

Design d’économie d’énergie

Ce programme est conçu pour obtenir l’installation de circuits par les fabricants d’équipements informatiques dans leurs produits afin de réduire la consommation en courant de ces derniers lorsqu’ils ne sont pas en fonctionnement

Lorsque ce moniteur est utilisé avec un PC sur lequel est installé un logiciel d’effacement d’écran conforme au protocole DPMS VESA (Display Power Management Signalling), il peut économiser une énergie significative en réduisant la consommation de courant lorsqu’il n’est pas en fonctionnement.

Il dispose de 2 lignes de signaux et de 3 modes de fonctionnement :
Mode activé (On), mode de veille (Sleep), mode désactivé (Off).

Mode	Définition
Mode activé (On)	Le fonctionnement normal. Lorsque le moniteur est en mode activé, étant connecté à une source d’alimentation, il affiche une image.
Mode de veille (Sleep)	L’état d’alimentation réduit. Le moniteur retourne au mode activé lorsque l’utilisateur déplace la souris ou appuie sur une touche sur le clavier.
Mode désactivé (Off)	L’état d’alimentation en énergie le plus faible. Le moniteur retourne au mode activé lorsque l’utilisateur appuie sur un interrupteur marche/arrêt.

Note

- *Les moniteurs design économiques en énergie fonctionnent uniquement lorsqu’ils sont connectés à des ordinateurs disposant de fonctionnalités d’économie d’énergie.*

ΕΛΛΗΝΙΚΆ

Σχεδίαση εξοικονόμησης ενέργειας

Το πρόγραμμα αυτό έχει σχεδιαστεί ώστε οι κατασκευαστές εξοπλισμού ηλεκτρονικών υπολογιστών να δημιουργούν τη διάταξη των κυκλωμάτων στα προϊόντα τους με τέτοιο τρόπο ώστε να μειώνεται η κατανάλωση ενέργειας όταν βρίσκονται εκτός λειτουργίας.

Όταν η οθόνη αυτή χρησιμοποιείται με υπολογιστή, στον οποίο έχει εγκατασταθεί λογισμικό κενής οθόνης που συμμορφώνεται με το πρωτόκολλο Display Power Management Signalling (DPMS - Σηματοδότηση διαχείρισης ενέργειας οθόνης) της VESA, μπορεί να επιτύχει σημαντική εξοικονόμηση ενέργειας μειώνοντας την κατανάλωση ρεύματος όταν βρίσκεται εκτός λειτουργίας.

Υπάρχουν 2 γραμμές σήματος, 3 τρόποι λειτουργίας :
Σε λειτουργία, Σε αδράνεια, Εκτός λειτουργίας.

Λειτουργία	Ορισμός
Σε λειτουργία	Η κανονική λειτουργία Όταν η οθόνη βρίσκεται σε λειτουργία και είναι συνδεδεμένη με μια πηγή τροφοδοσίας, εμφανίζεται εικόνα.
Σε αδράνεια	Όταν η οθόνη βρίσκεται σε κατάσταση μειωμένης ενέργειας και ο χρήστης μετακινεί το ποντίκι ή πατάει κάποιο πλήκτρο στο πληκτρολόγιο, τότε η οθόνη επιστρέφει σε λειτουργία.
Εκτός λειτουργίας	Όταν η οθόνη βρίσκεται σε κατάσταση χαμηλότερης κατανάλωσης ενέργειας και ο χρήστης πατάει το διακόπτη λειτουργίας, τότε η οθόνη επιστρέφει σε λειτουργία.

Σημείωση

- *Οι οθόνες με σχεδίαση εξοικονόμησης ενέργειας λειτουργούν μόνο όταν είναι συνδεδεμένες με υπολογιστές που διαθέτουν δυνατότητες εξοικονόμησης ενέργειας.*

УКРАЇНСЬКА

Програма енергозбереження

Ця програма має на меті стимулювати виробників комп'ютерного обладнання до впровадження у своїх виробах засобів зменшення енергоспоживання під час простою.

Якщо на підключеному персональному комп'ютері встановлено програмне забезпечення вимкнення екрана, сумісне з протоколом сигналів керування живленням дисплея VESA DPMS, цей монітор забезпечує суттєву економію електроенергії за рахунок зниження енергоспоживання в той час, коли ним не користуються.

Передбачено 2 сигнальні лінії та 3 режими роботи:
"ввімкнено", "очікування" та "вимкнено".

Режим	Пояснення
Режим "увімкнено"	Звичайний режим роботи виробу. Коли монітор підключений до джерела живлення і ввімкнений, на екрані відображається зображення.
Режим очікування	У цьому режимі монітор споживає менше електроенергії. З нього можна повернутися в режим "увімкнено" порухом мишки або натисненням будь-якої клавіші на клавіатурі.
Режим "вимкнено"	У цьому режимі енергоспоживання монітора мінімальне. З нього можна повернутися в режим "увімкнено" натисненням кнопки живлення на моніторі.

Примітка

- *Функція енергозбереження монітора працюватиме лише за умови наявності відповідної функції на під'єднаному комп'ютері.*

ITALIANO

Programma di risparmio energetico

Questo programma è stato messo a punto affinché i produttori di computer producano circuiti per i loro prodotti in grado di limitare il consumo energetico quando non sono in funzione.

Quando questo monitor viene utilizzato con un PC su cui è installato un software per l'annullamento dello schermo conforme al protocollo VESA DPSM (Display Power Management Signalling), è in grado di risparmiare una quantità significativa di energia riducendo il consumo quando non è in fuzione.

Sono disponibili 2 linee di segnale, 3 modalità operative:
Modalità On, modalità Sleep, modalità Off.

Modalità	Definizione
Modalità On	Funzionamento normale. Quando il monitor si trova in modalità On ed è connesso a una sorgente elettrica, viene visualizzata un'immagine.
Modalità Sleep	Stato di consumo energetico ridotto. Torna alla modalità On quando l'utente sposta il mouse o preme un tasto sulla tastiera.
Modalità Off	Stato di consumo energetico ridotto al massimo. Torna alla modalità On quando l'utente premere un interruttore.

Nota

- *I monitor conformi al Programma di risparmio energetico funzionano solo se connessi a computer dotati di funzionalità di risparmio energetico.*

РУССКИЙ

Функция сохранения энергии

Эта программа разработана для создания и внедрения производителями компьютерного оборудования схем, позволяющих снизить потребление электроэнергии, когда компьютер не находится в рабочем режиме.

Если монитор используется с ПК, на котором установлено программное обеспечение для затемнения экрана, соответствующее протоколу VESA Display Power Management Signalling (DPMS), он может экономить энергию, сокращая ее потребление, когда не находится в рабочем режиме.

Существуют 2 сигнальные линии, 3 режима работы:
Включен, Ожидание, Выключен

Режим	Описание
Вкл-ючен	Обычный режим работы. Когда монитор подключен к источнику питания и находится в режиме «Включен», он выводит изображение на экран.
Ожид-ание	Энергопотребление снижено. Компьютер возвращается в режим «Включен», когда пользователь перемещает мышь или нажимает любую клавишу на клавиатуре.
Вык-лючен	Энергопотребление минимально. Компьютер переходит в режим «Включен», когда пользователь нажимает кнопку включения питания.

Примечание

• *Мониторы с функцией сохранения энергии работают только при соединении с компьютерами, поддерживающими эту функцию.*

POLSKI

Oszczdzanie energii

Ten program został stworzony, aby producenci sprztu komputerowego mieli moliwoć wbudowania do swoich produktów zespołów obwodów elektrycznych redukuj"cych pobór mocy w stanie bezczynnoci.

W przypadku uycia tego monitora na komputerze osobistym (PC), na którym zainstalowano oprogramowanie wygaszaj"ce ekran zgodne z protokołem VESA (DPMS – Display Power Management Signallising), umoliwia on zaoszczdzanie znacznych iloci energii poprzez redukcj poboru mocy w stanie bezczynnoci.

Istniej" 2 linie sygnału, 3 tryby pracy:
Wł"czony, Upienie, Wył"czony.

Tryb	Definicja
Wł"czony	Normalny proces działania. W trybie „wł"czony” monitor podł"czony jest do 8ródła zasilania i wywietla obraz.
Upienie	Stan zredukowanego poboru mocy. Przywraca do stanu „wł"czony”, gdy uytkownik poruszy myszk" lub przycinie dowolny klawisz na klawiaturze.
Wył"czony	Stan najmniejszego poboru mocy. Przywraca do stanu „wł"czony”, gdy uytkownik nacinie wł"cznik zasilania.

Uwaga

• *Monitory z funkcj" oszczdzania energii działaj" tylko, jeli s" podł"czone do komputerów posiadaj"cych właciwoci oszczdzania energii.*

繁體中文

節能設計

此程式用於幫助電腦設備製造廠商在他們的產品中建立電路，藉此降低產品處於非作業狀態時的功率
消耗量。

本顯示器與已安裝符合 VESA 顯示能源管理訊號 (DPMS) 協定之螢幕抑制顯示軟體的電腦配合使用時，可降低處於非作業狀態時的功率消耗量，進而節省大量能源。

共有 2 根訊號線以及 3 種作業模式：
開啟模式、睡眠模式和關閉模式。

模式	定義
開啟模式	正常作業模式。 顯示器與電源連接並處於開啟模式時，會顯示影像。
睡眠模式	低功率消耗狀態。 若使用者移動滑鼠或按鍵盤上的鍵，則返回開啟模式。
關閉模式	最低功率消耗狀態。 若使用者按電源開關，則返回開啟模式。

註

•該節能設計顯示器僅在連接至具有節能功能的電腦時才能發揮其節能作用。

العربية

تصميم موفر للطاقة

تم إعداد هذا البرنامج بحيث تتمكن شركات تصنيع أجهزة الكمبيوتر من إدماج مجموعة دارات إلكترونية في منتجاتها للحد من استهلاك الطاقة عند عدم تشغيل المنتج.

فعند استخدام هذه الشاشة مع جهاز كمبيوتر عليه برنامج الشاشة الفارغة المتوافق مع بروتوكول بث إشارات إدارة طاقة الشاشة (DPMS) المثبت وفق معايير VESA، قد توفر حجماً كبيراً من الطاقة من خلال الحد من استهلاك الطاقة عند عدم تشغيلها.

يتوفر خطا إشارة، وثلاثة أوضاع تشغيل.
: وضع التشغيل، ووضع السكون، ووضع إيقاف التشغيل.

وضع	التعريف
وضع التشغيل	التشغيل العادي تعرض الشاشة صورة عندما تكون في وضع التشغيل ومتصلة بمصدر طاقة.
وضع السكون	تعود حالة توفير الطاقة إلى وضع التشغيل عندما يحرك المستخدم الماوس أو يضغط على أي مفتاح على لوحة المفاتيح.
وضع إيقاف التشغيل	تعود حالة استهلاك الطاقة الأدنى إلى وضع التشغيل عندما يضغط المستخدم على مفتاح الطاقة.

ملاحظة

• تعمل الشاشات ذات التصميم الموفر للطاقة فقط عند توصيلها بأجهزة الكمبيوتر المزودة بميزات توفير الطاقة.

ENGLISH

DDC (Display Data Channel)

DDC is a communication channel over which the monitor automatically informs the host system (PC) about its capabilities.

DDC protocol

① DDC1/DDC2B
An uni-directional communication channel.

② DDC 2AB/DDC2B+/DDC2Bi
A bi-directional communication channel.

Note

• *PC must support DDC functions to do this.*

E-DDC (Enhanced DDC)

A protocol based on I²C and used on a bi-directional data channel between the display and host. This protocol accesses devices at I²C address of A0/A1 as well as the address 60. The 60 address is used as a segment register to allow larger amounts of data to be retrieved than is possible using DDC2B protocols. The protocol is compatible with DDC2B protocols.

DEUTSCH

DDC (Display Data Channel)

DDC ist ein Kommunikationskanal, über weiche Sie von Ihrem Monitor automatisch über das verbundene System (PC) und seine Fähigkeiten informiert werden.

DDC Protokoll

① DDC1/DDC2B
Ein unidirektionaler Kommunikationskanal.

② DDC 2AB/DDC2B+/DDC2Bi
Ein bidirektionaler Kommunikationskanal.

Anmerkung

• *Der PC muß für DDC Funktionen eingerichtet sein.*

E-DDC (Erweitertes DDC)

Ein Protokoll, das auf I2C basiert und in einem bidirektionalen Datenkanal zwischen Anzeige und Host eingesetzt wird. Dieses Protokoll greift an der I2C-Adresse von A0/A1 und an der Adresse 60 auf Gerate zu. Die Adresse 60 dient als Segmentregister und ermoglicht den Abruf von großeren Datenmengen als mit den DDC2B-Protokollen. Das Protokoll ist mit den DDC2B-Protokollen kompatibel.

FRANÇAIS

DDC (Display Data Channel)

DDC est une chaine de communication par le biais de laquelle le moniteur prévient automatiquement le systéme central (PC) de ces capacités.

Protocole DDC

① DDC1/DDC2B
Canal de communication unidirectionnel.

② DDC 2AB/DDC2B+/DDC2Bi
Canal de communication bidirectionnel.

Remarque

• *Le PC doit posséder les fonctions DDC pour cela.*

E-DDC (Commande numérique directe (DDC) optimisée)

Protocole fondé sur l'I²C et appliqué à un canal bi-directionnel de transmission de données placé entre l'écran et l'hôte. Ce protocole accède aux périphériques à l'adresse I²C de A0/A1 ainsi qu'à l'adresse 60. L'adresse 60 est utilisée comme registre de segment afin d'obtenir des quantités de données supérieures à ce que permettent les protocoles DDC2B. Ce protocole est compatible avec les protocoles DDC2B.

ITALIANO

DDC (Display Data Channel)

Il DDC è un canale di comunicazione attraverso il quale il monitor informa automaticamente il sistema ospite (PC) circa le proprie capacità.

Protocollo DDC

① DDC1/DDC2B
Un canale di comunicazione uni-direzionale.

② DDC 2AB/DDC2B+/DDC2Bi
Un canale di comunicazione bi-direzionale.

Nota

• *Per fare questo il PC deve supportare le funzioni DDC.*

E-DDC (DDC potenziato)

Protocollo basato su I²C e utilizzato su un canale dati bidirezionale tra monitor e host. Questo protocollo accede a dispositivi con indirizzo I²C di A0/A1 nonche all'indirizzo 60. L'indirizzo 60 viene utilizzato come registro di segmento per consentire di recuperare quantita di dati superiori rispetto a quanto e possibile utilizzando i protocolli DDC2B. Il protocollo e compatibile con i protocolli DDC2B.

ESPANÕL

DDC (Canal de despliegue de información)

DDC es un canal de comunicacion sobre el cual el monitor automáticamente informa al sistema anfitrión (PC) sobre sus capacidades.

Protocolo DDC

① DDC1/DDC2B
Un canal de comunicación unidireccional.

② DDC 2AB/DDC2B+/DDC2Bi
Un canal de comunicación bidireccional.

Nota

• *La PC debe soportar las funciones DDC para poder hacer esto.*

E-DDC (DDC mejorado)

Un protocolo que se basa en I²C y se usa en un canal de datos bidireccional entre el monitor y el sistema host. Este protocolo accede a los dispositivos en la direccion I²C de A0/A1, asi como en la direccion 60. La direccion 60 se usa como un registro de segmentos para poder recuperar mas cantidad de datos de lo que es posible mediante los protocolos DDC2B. El protocolo es compatible con protocolos DDC2B.

PORTUGUÊS

DDC (Display Data Channel)

DDC é um canal de comunicação através do qual o monitor informa ao computador a respeito de suas características.DDC

Protokoll

① DDC1/DDC2B
Um canal de comunicação unidirecional.

② DDC 2AB/DDC2B+/DDC2Bi
Um canal de comunicação bidirecional.

Ovservação

• *O PC deve suportar DDC para fazer isso.*

E-DDC (DDC Aperfeicoado)

Um protocolo com base em I²C que e utilizado em um canal de dados bidirecional entre o monitor e o host. Este protocolo acessa dispositivos no endereco I²C do A0/A1 assim como no endereco 60. O endereco 60 e utilizado com um registro de segmento que permite que maiores quantidades de dados sejam recuperados que quando se utiliza os protocolos DDC2B. O protocolo e compativel com os protocolos DDC2B.

NEDERLANDS

DDC (Display Data Channel)

DDC is een communicatiekanaal waarmee de monitor het hostsysteem (PC) automatisch informeert over zijn mogelijkheden.

DDC-protocol

① DDC1/DDC2B
Een unidirectioneel communicatiekanaal.

② DDC 2AB/DDC2B+/DDC2Bi
Een bidirectioneel communicatiekanaal.

OPMERKING

• *Dit kan alleen als de PC DDC ondersteunt.*

E-DDC (Uitgebreide DDC)

Een op I²C gebaseerd protocol dat wordt gebruikt op een gegevenskanaal in twee richtingen, tussen het scherm en de host. Dit protocol geeft toegang tot apparatuur met A0/A1 en 60 als I²C-adres. Het adres 60 wordt gebruikt als een segmentregister waarmee in vergelijking met DDC2Bprotocollen grotere hoeveelheden gegevens kunnen worden gezocht. Het protocol is compatible met DDC2B-protocollen.

РУССКИЙ

Канал обмена данных между монитором и компьютером DDC.

DDC-канал связи, по которому монитор автоматически информирует компьютер о своих возможностях.

Протокол DDC

① DDC1/DDC2B
Односторонний канал связи

② DDC 2AB/DDC2B+/DDC2Bi
Двусторонний канал связи.

ПРИМЕЧАНИЕ

• *Примечание: Для работы в этом режиме необходимо загрузить соответствующий драйвер компьютера.*

E-DDC (Расширенный канал передачи данных)

Протокол, основанный на технологии I2C, который используется для двусторонней передачи данных между дисплеем и источником видеоданных. Для доступа к устройствам используются биты адреса I2C (A0/A1), а также адрес 60.
Адрес 60 указывает на регистр сегментов, который позволяет получать большие объемы данных, чем при использовании протокола DDC2B. Этот протокол совместим с протоколами DDC2B.

한국어

DDC(디스플레이 데이터 채널)

DDC 는 모니터의 기능에 관한 정보를 자동으로 호스트 시스템 (PC) 에 제공하는 통신 채널입니다

DDC protocol

① DDC1/DDC2B
단방향 통신 채널 channel.

② DDC 2AB/DDC2B+/DDC2Bi
양방향 통신 채널 .

주

• PC 가 DDC 기능을 지원해야 합니다 .

E-DDC(확장 DDC)

I²C 에 기반을 둔 프로토콜로써 디스플레이와 호스트간의 양방향 데이터 채널 상에서 사용됩니다 . 이 프로토콜은 A0/A1 의 I²C 주소 및 주소 60 을 통해 장치에 액세스합니다 . 주소 60 은 세그먼트 레지스터로 사용되어 DDC2B 프로토콜을 사용한 것보다 더 큰 용량의 데이터 검색을 가능하게 합니다 . 이 프로토콜은 DDC2B 와 호환됩니다 .

日本語

DDC(ディプレイ・データ・チャンネル)

DDC 葉、モニターがその状態をホスト・システム(PC)へ自動的に通知する通信チャンネルです。

DDC プロトコル

① DDC1/DDC2B
一方向通信チャンネル。

② DDC 2AB/DDC2B+/DDC2Bi
双方向通信チャンネル。

注

・このためにはPCがDDC機能をサポートしなければなりません。

E-DDC(Enhanced Display Data Channel)

I²C ベースプロトコルで、ディスプレイとホスト間の双方向データチャネルに使用するプロトコル。
このプロトコルを使用して、60 というアドレスと同様に、A0/A1 という I²C アドレスのデバイスにアクセスします。
60 というアドレスをセグメントレジスタとして使用すると、DDC2B プロトコルを使用するよりも、大容量のデータを取り出すことができます。E-DDC は DDC 2B プロトコルと互換性があります。

العربية

DDC (قناة بيانات الشاشة)

DDC هي قناة تواصل تُعلم الشاشة من خلالها النظام المضيف (الكمبيوتر) تلقائياً حول قدراتها.

بروتوكول DDC

① DDC٢B/DDC١

قناة تواصل أحادية الاتجاه.

② DDC ٢AB/DDC٢B+/DDC٢Bi

قناة تواصل ثنائية الاتجاه.

ملاحظة

يجب أن يعتمد الكمبيوتر وظائف DDC للقيام بذلك.

E-DDC (DDC معززة)

يستند البروتوكول إلى I٢C ويُستخدم على قناة بيانات ثنائية الاتجاه بين الشاشة والجهاز المضيف. يصل هذا البروتوكول إلى الأجهزة على عنوان I٢C الخاص بـ A١/A٠ بالإضافة إلى العنوان ٦٠. يُستخدم العنوان ٦٠ كسجل مقطع للسماح باسترداد كميات كبيرة من البيانات تفوق الكميات الممكنة باستخدام بروتوكولات DDC٢B.

البروتوكول متوافق مع بروتوكولات DDC٢B.